

Patent Abstracts of Japan

PUBLICATION NUMBER : 58022902  
PUBLICATION DATE : 10-02-83

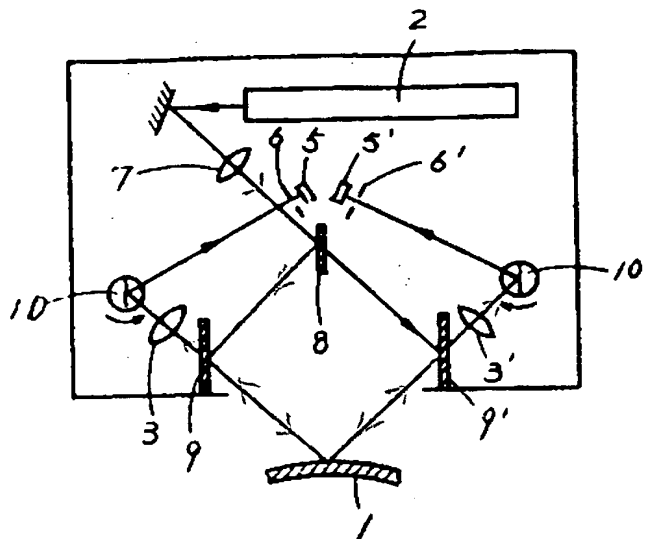
APPLICATION DATE : 04-08-81  
APPLICATION NUMBER : 56121333

APPLICANT : ASAHI GLASS CO LTD;

INVENTOR : UEDA TAKAMASA;

INT.CL. : G01B 11/06

TITLE : THICKNESS MEASURING METHOD OF  
CURVED SURFACE TRANSPARENT  
BODY



ABSTRACT : PURPOSE: To reduce a measurement error caused by a variation of a distance between an optical system and an object to be measured, by scanning an image by a rotary mirror provided to a focus of a lens provided to an optical path, and deriving an arithmetical mean of a time difference of impulsive signals generated by reflected images of both front and rear side.

CONSTITUTION: For instance, spot light from an He-Ne laser light source 2 becomes sharp slit light on a curved surface transparent body for measuring thickness, for instance, a TV panel 1, by a cylindrical lens 7. In this way, since incident light is converted to a slit shape, unstabilization of a measured value due to a fine uneven inside surface of the panel 1 is solved. Length and width of this slit light are selected in accordance with an area to which it is desired to average a measurement, the slit-like incident light is separated into 2 directions by a beam splitter 8, and is reflected by half-mirrors 9, 9' so as to be irradiated from symmetrical directions against a thickness measuring part of the TV panel 1.

COPYRIGHT: (C) JPO

BEST AVAILABLE COPY